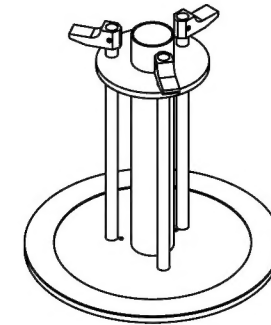
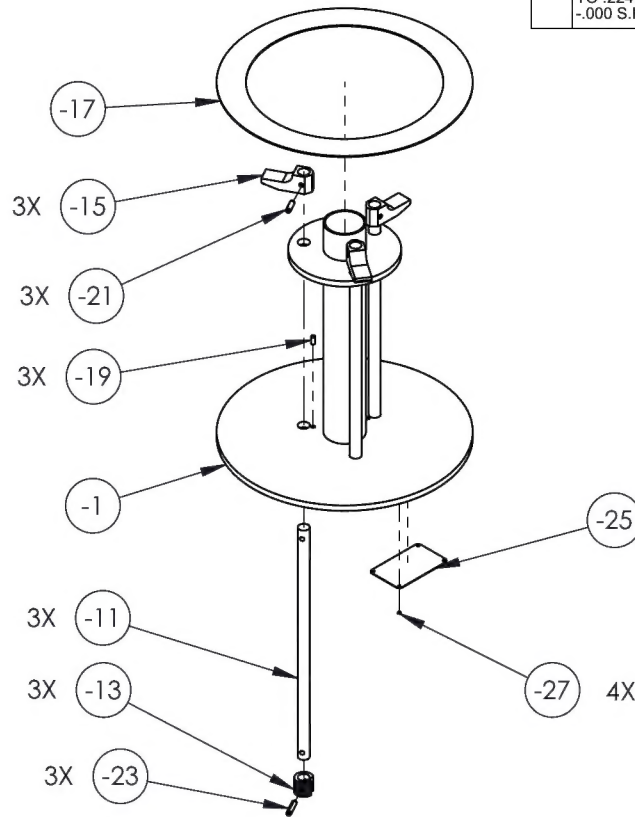


This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	CH'D T/N WAS RBEA91-3293-00 IS RBE332A91-3293-00. -3 CH'D DIM WAS 3X Ø.571 IS 3X Ø.578 S.F. -11. -5 CH'D DIM WAS 3X Ø.571 IS 3X Ø.578 S.F. -11. -11 CH'D DIM WAS 2X Ø.219 IS 2X LIMITS Ø.219 TO .224. -13 & -15 CH'D DIMS WAS Ø.219 IS LIMITS Ø.219 TO .224, WAS Ø.563 S.F. -11 IS Ø.565 +.002 -.000 S.F. -11. CH'D TOLERANCE ON NON-CRITICAL PARTS.	5/19/2014	DPD	RJC



NOTE:

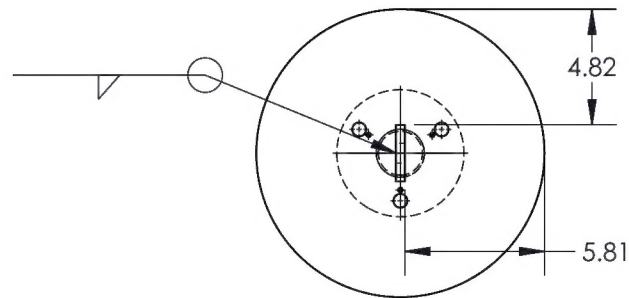
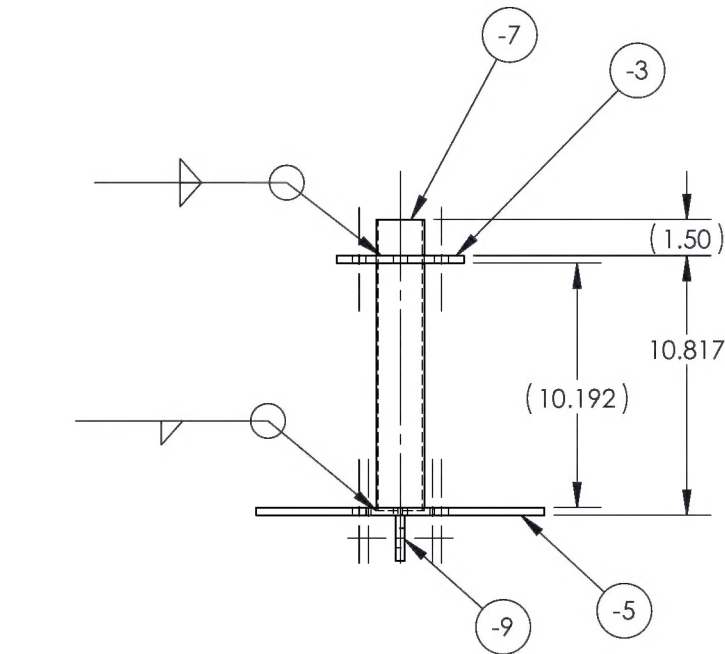
1. PRESS 3 -19 (DOWEL PINS) INTO -1 (WELDMENT), PINS ARE FLUSH TO INSIDE SURFACE.
2. ENGRAVE PLACARD T/N, S/N, & "WORKING LOAD 360 LBF (160 daN) TESTING LOAD 720 LBF (320 daN)"

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
	X		-1	1	WELDMENT			2
	1		-3		TOP PLATE	A36 P & O	5/16 X Ø12	3
	1		-5		BOTTOM PLATE	A36 P & O	5/16 X Ø5-1/2	5
	1		-7		TUBE	DOM	Ø2.0 X .083 WALL x 12	4
	1		-9		TAB	A36 P & O	3/8 X 2 X 2-1/2	6
			-11	3	ROD	SP	Ø9/16 X 13-1/4	7
			-13	3	KNOB	1018	Ø1 X 1	8
			-15	3	FOOT	A36 P & O	1 X 1 X 2-1/2	9
			-17	1	GASKET	GASKET RUBBER	1/16 X Ø12 GASKET SPECIALTIES	10
		B/O	-19	3	DOWEL PIN	STEEL	Ø3/16 X 7/16 MCMaster-CARR #98381A504	1
		B/O	-21	3	SPRING PIN	S.S.	Ø7/32 X 3/4 MCMaster-CARR #92373A309	1
		B/O	-23	3	SPRING PIN	S.S.	Ø7/32 X 1 MCMaster-CARR #92373A313	1
		B/O	-25	1	DART PLACARD	ALUMINUM	RED BARN #RB41011	1
		B/O	-27	4	#2 DRIVE SCREW	COATED STEEL	1/8 MCMaster-CARR #90081A074	1
ASSY -1								

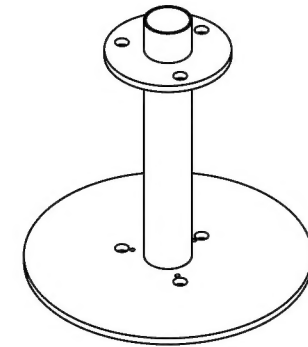
		TITLE REDUCTION MODULE SLING	
DWG NO. RBE332A91-3293-00		REV 1	
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°		DRAWN BY: GILBERT APPROVED: <i>D Weil</i> HEAT TREAT FINISH SPEC	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R		USED ON MODEL AS332	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING		SCALE 1:9 DATE 4/22/2011 SHEET 1 OF 11	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS			
REV	DESCRIPTION	DATE	INITIAL
			APPROVED



(1)
WELDMENT



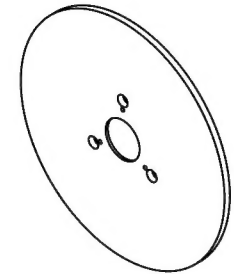
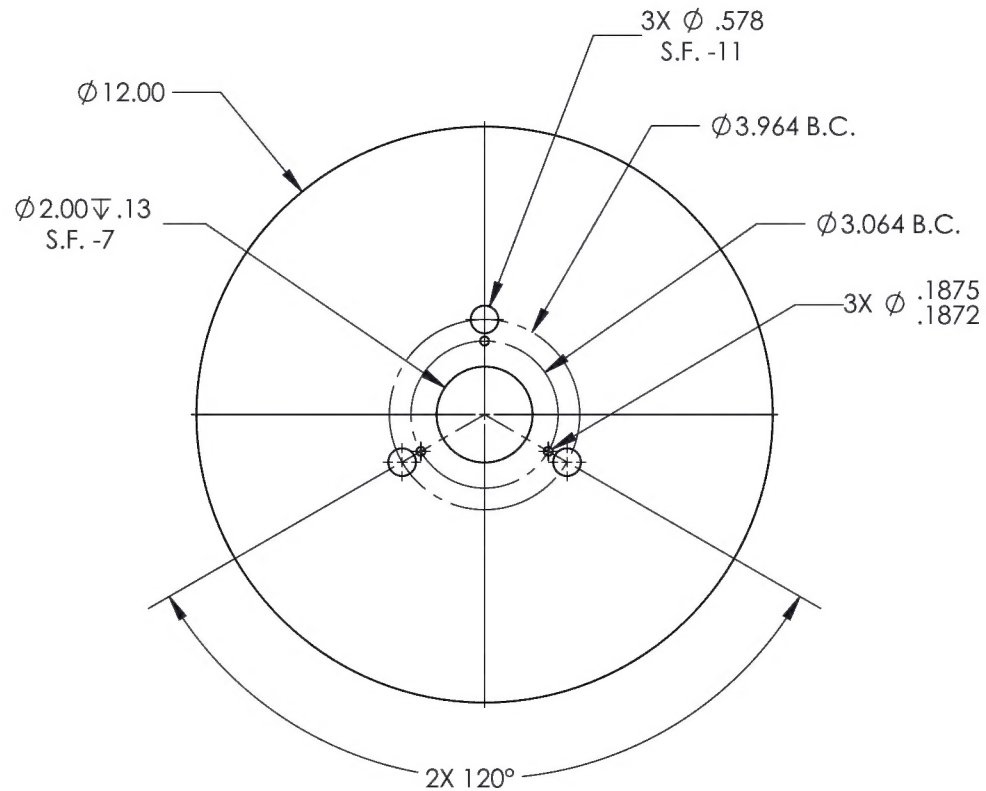
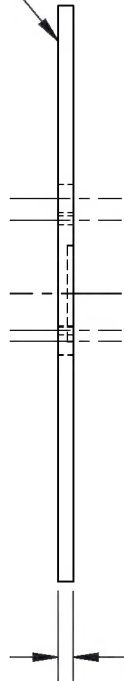
NOTE:
ALIGN 3 HOLES IN TOP PLATE -3 WITH 3 HOLES
IN BOTTOM PLATE -5, FIXTURE AS NEEDED.

DART AEROSPACE	
TITLE REDUCTION MODULE SLING	
DWG NO. RBE332A91-3293-00-1	REV 1
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 .XX ± .01 .X ± .1	DRAWN BY: GILBERT APPROVED <i>D Weil</i> HEAT TREAT FINISH SPEC QQ-P-416F, TYPE I, CLASS II USED ON MODEL AS332
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:8	DATE 4/22/2011
SHEET 2 OF 11	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS			
REV	DESCRIPTION	DATE	INITIAL
1	-3 CH'D DIM WAS 3X Ø.571 IS 3X Ø.578 S.F. -11.	5/19/2014	DPD
			RJC

ENGRAVE T/N



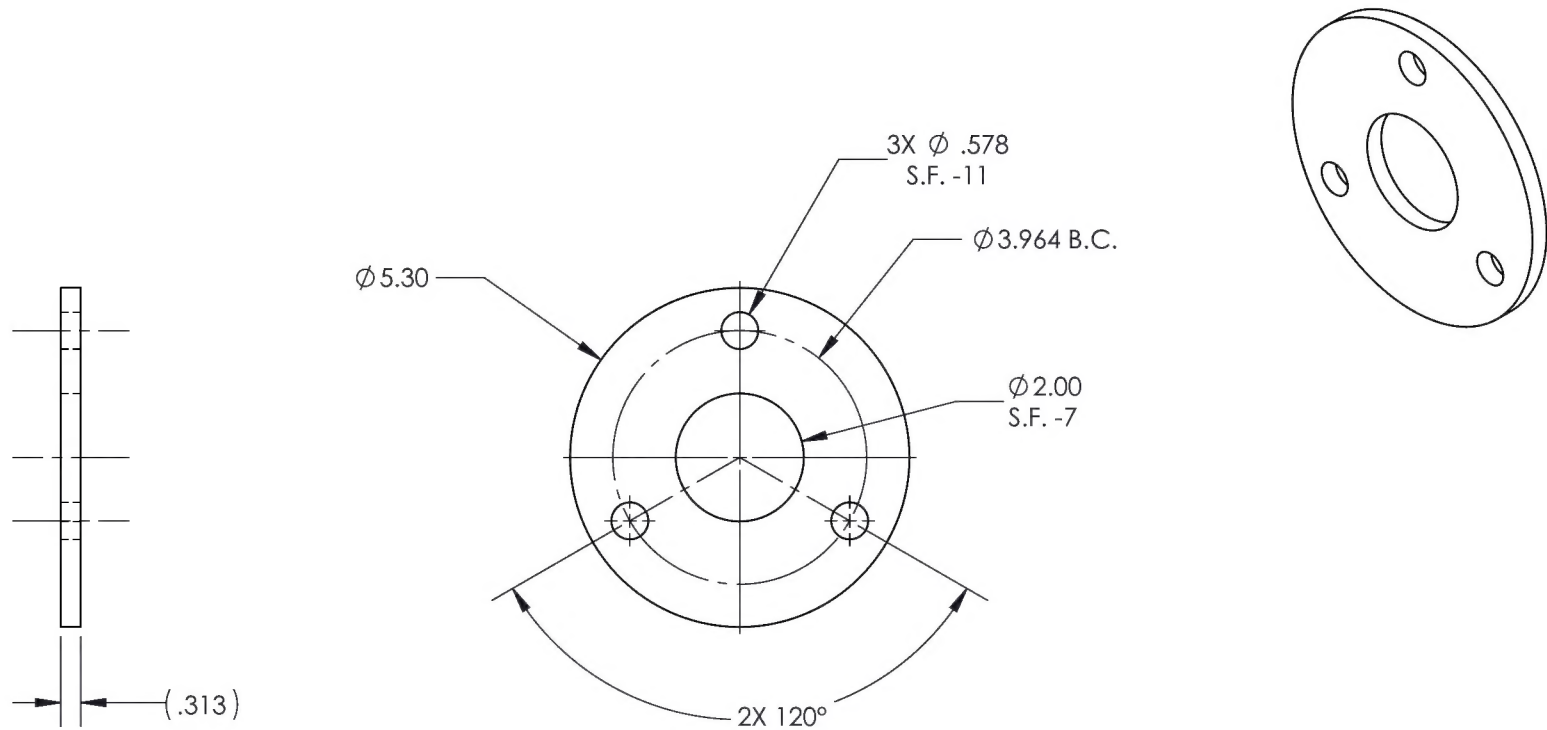
(-3)

TOP PLATE

DART AEROSPACE	
TITLE REDUCTION MODULE SLING	
DWG NO. RBE332A91-3293-00-3	REV 1
MAT'L A36 P & O	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005 FRACTIONS ± 1/32	HEAT TREAT
.XX ± .01 ANGLES ± 5°	FINISH SEE -1 WELDMENT
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	AS332
SCALE 1:4	DATE 4/22/2011
SHEET 3 OF 11	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	-5 CH'D DIM WAS 3X Ø.571 IS 3X Ø.578 S.F. -11.	5/19/2014	DPD	RJC

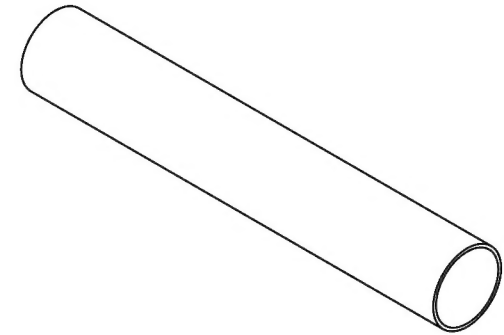
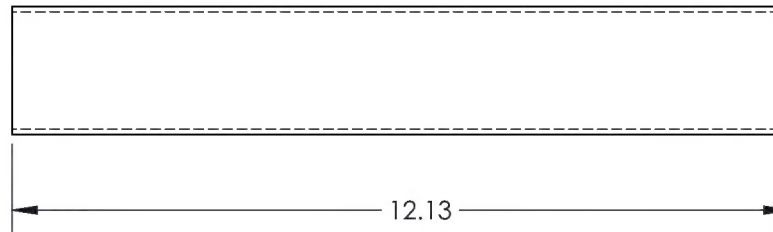
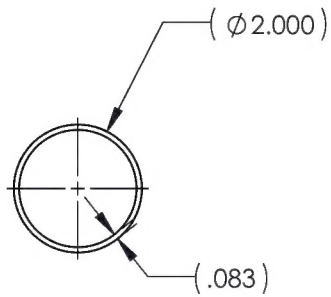


(-5)
BOTTOM PLATE

DART AEROSPACE	
TITLE REDUCTION MODULE SLING	
DWG NO. RBE332A91-3293-00-5	REV 1
MAT'L A36 P & O	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005 .XX ± .01 .X ± .1	HEAT TREAT FINISH SEE -1 WELDMENT
FRACTIONS ± 1/32 ANGLES ± 5°	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	AS332
SCALE 1:3	DATE 4/22/2011
SHEET 4 OF 11	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED



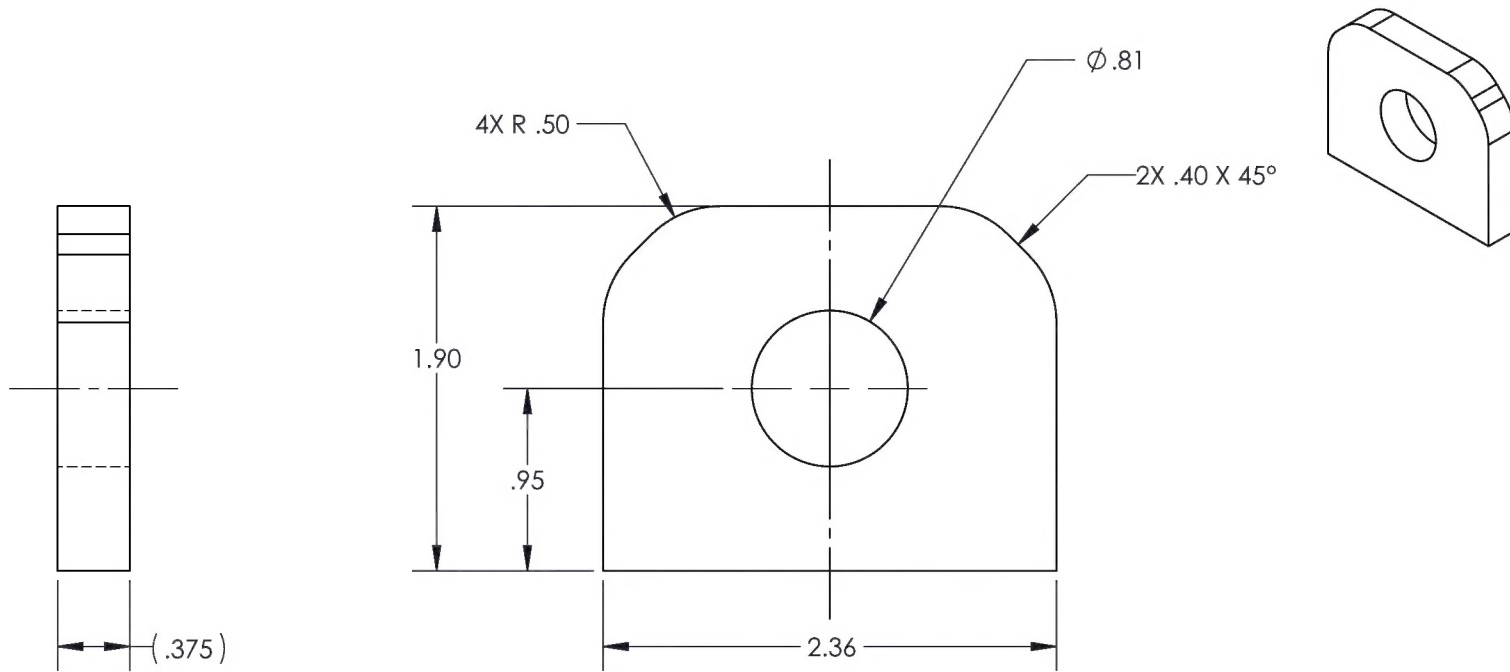
(-7)

TUBE

DART AEROSPACE	
TITLE REDUCTION MODULE SLING	
DWG NO. RBE332A91-3293-00-7	REV 1
MAT'L DOM	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX \pm .005	HEAT
.XX \pm .01	TREAT
.X \pm .1	FINISH SEE -1 WELDMENT
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
	AS332
SCALE 1:3	DATE 4/22/2011
	SHEET 5 OF 11

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS			
REV	DESCRIPTION	DATE	INITIAL



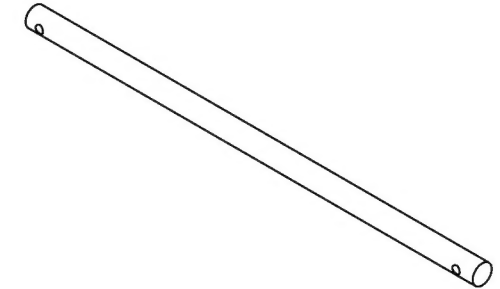
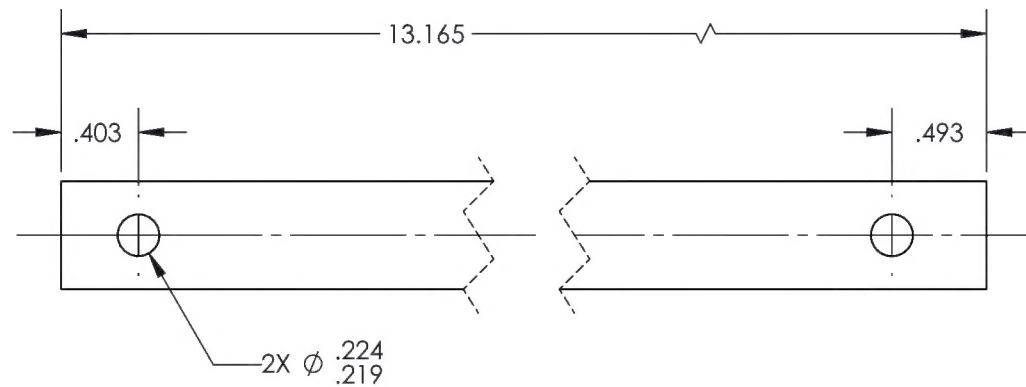
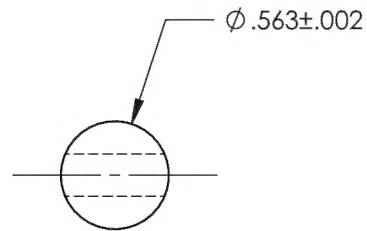
(-9)

TAB

DART AEROSPACE	
TITLE REDUCTION MODULE SLING	
DWG NO. RBE332A91-3293-00-9	REV 1
MAT'L A36 P & O	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT TREAT
.XX ± .01	FINISH SEE -1 WELDMENT
.X ± .1	ANGLES ± 5°
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL AS332
SCALE 1:1	DATE 4/22/2011
SHEET 6 OF 11	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	-11 CH'D DIM WAS 2X Ø.219 IS 2X LIMITS Ø.219 TO .224.	5/19/2014	DPD	RJC



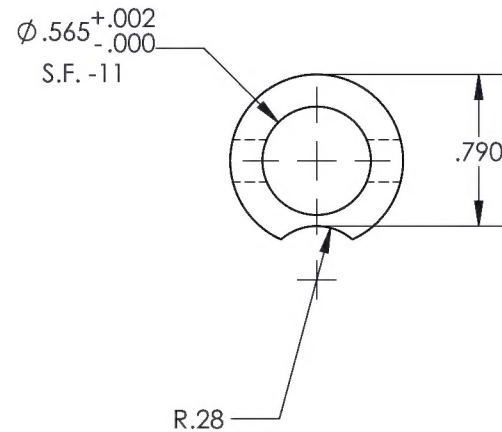
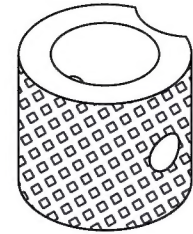
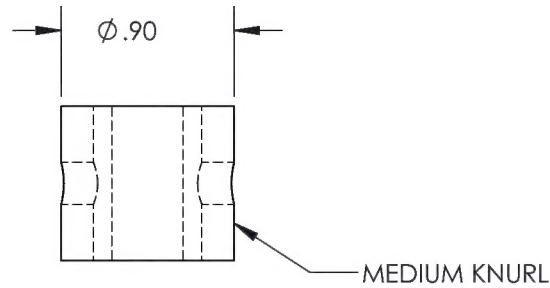
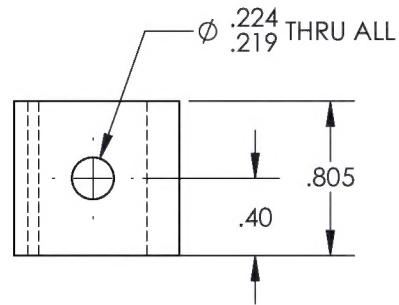
(-11)

ROD

DART AEROSPACE	
TITLE REDUCTION MODULE SLING	
DWG NO. RBE332A91-3293-00-11	REV 1
MAT'L SP UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/32 .XX ± .01 ANGLES ± 5° .X ± .1	DRAWN BY: GILBERT APPROVED <i>D Weil</i> HEAT TREAT FINISH CAD PLATE SILVER SPEC QQ-P-416F, TYPE I, CLASS II USED ON MODEL AS332
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:1	DATE 4/22/2011
SHEET 7 OF 11	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	-13 CH'D DIMS WAS Ø.219 IS LIMITS Ø.219 TO .224, WAS Ø.563 S.F. -11 IS Ø.565 +.002 -.000 S.F -11.	5/19/2014	DPD	RJC

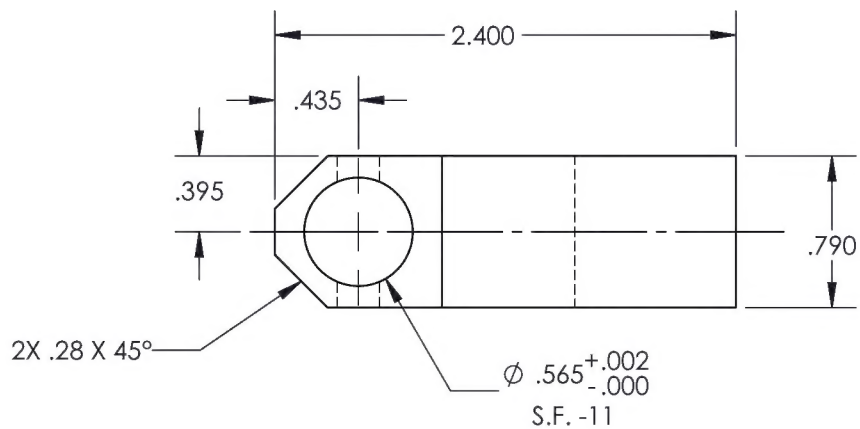
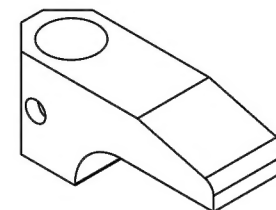
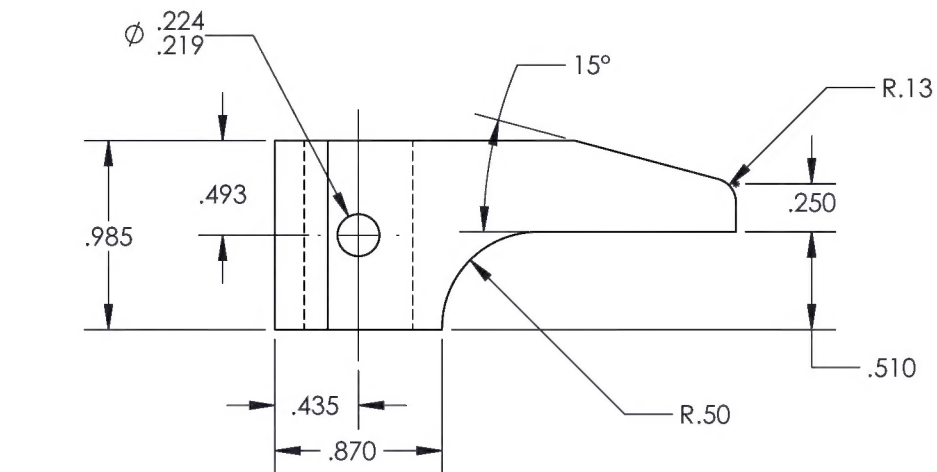


(-13)
KNOB

DART AEROSPACE	
TITLE REDUCTION MODULE SLING	
DWG NO. RBE332A91-3293-00-13	REV 1
MAT'L 1018	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005 FRACTIONS ± 1/32	HEAT TREAT
.XX ± .01 ANGLES ± 5°	FINISH CAD PLATE SILVER
.X ± .1	SPEC QQ-P-416F, TYPE I, CLASS II
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	AS332
SCALE 1:1	DATE 4/22/2011
SHEET 8 OF 11	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	-15 CH'D DIMS WAS Ø.219 IS LIMITS Ø.219 TO .224, WAS Ø.563 S.F. -11 IS Ø.565 +.002 -.000 S.F. -11.	5/19/2014	DPD	RJC



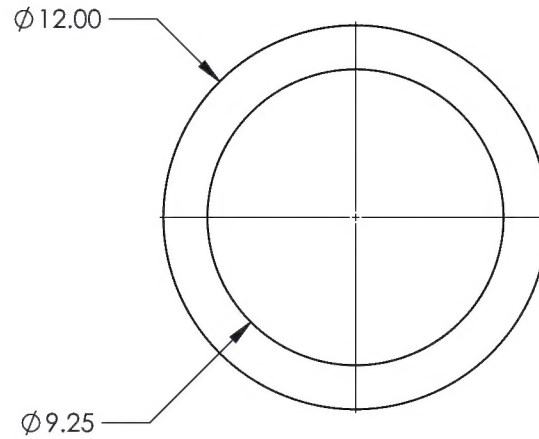
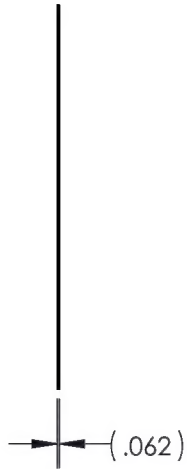
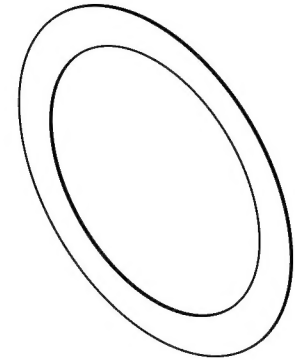
(-15)

FOOT

DART AEROSPACE	
TITLE REDUCTION MODULE SLING	
DWG NO. RBE332A91-3293-00-15	REV 1
MAT'L A36 P & O	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005 .XX ± .01 .X ± .1	HEAT TREAT FINISH CAD PLATE SILVER
FRACTIONS ± 1/32 ANGLES ± 5°	SPEC QQ-P-416F, TYPE I, CLASS II
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	AS332
SCALE 1:1	DATE 4/22/2011
SHEET 9 OF 11	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS			
REV	DESCRIPTION	DATE	INITIAL
APPROVED			



(-17)
GASKET

DART AEROSPACE	
TITLE REDUCTION MODULE SLING	
DWG NO. RBE332A91-3293-00-17	REV 1
MAT'L GASKET RUBBER	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT
.XX ± .01	TREAT
.X ± .1	FINISH
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL AS332
SCALE 1:6	DATE 4/22/2011
SHEET 10 OF 11	

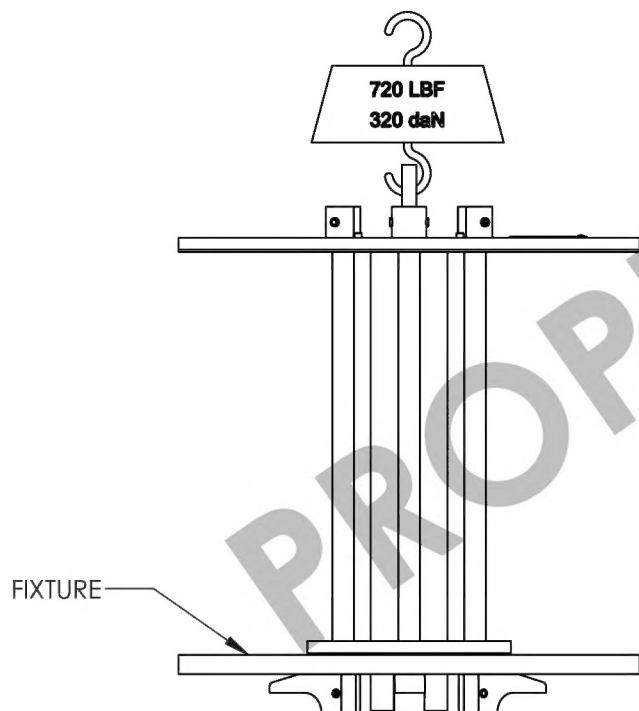
This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace.

REVISIONS			
REV	DESCRIPTION	DATE	INITIAL

RED BARN MACHINE
190 S. DANEBO AVE., EUGENE OR. 97402
(541)344-9953; fax (541)344-3863
e-mail; sales@redbarn.net

INSPECTION & TESTING PROCEDURES FOR THE RBEA91-3263-00
REDUCTION MODULE SLING. THIS ASSEMBLY SHOULD BE
INSPECTED BEFORE EACH USE.
REPLACE ANY ITEMS THAT ARE DAMAGED OR SUSPECTED
OF DAMAGE BEFORE USING!

FIRST ARTICLE WEIGHT TEST



FIRST ARTICLE WEIGHT TEST

1. AFTER INSPECTION, PLACE REDUCTION MODULE SLING IN A APPROPRIATE FIXTURE. LIFT USING A TAB ON BOTTOM.
2. LIFT UNTIL THE SCALE READS 720 lbs. (320 daN), FOR AT LEAST 5 MINUTES, CONTINUALLY CHECKING FOR CRACKS, DEFLECTION, OR DISTORTION.
3. LOWER REDUCTION MODULE SLING AND RE-INSPECT, CHECKING FOR STRESS CRACKS, BENDING, OR DISTORTIONS.

INSPECTOR _____

TESTER _____

S.N. _____

DATE _____



190 S. Danebo Ave., Eugene, OR. 97402
1-800-556-4166
e-mail: sales@dartaero.com
dartaerospace.com

TITLE REDUCTION MODULE SLING			
DWG NO. RBE332A91-3293-00	REV 1	CUSTOMER 1 OF 1	
SCALE 1:5	DATE 8/1/2011	SHEET	11 OF 11